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COMPRESSOR REPLACEMENT IN AUTOMAKER RETROFIT PROCEDURES

OZONE PROTECTION HOTLINE TOLL-FREE (800) 296-1996

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Many technicians and vehicle owners are still under the impression that every time a vehicle is retrofitted from CFC-12 to R-134a refrigerant, the compressor in the A/C system must be replaced. While compressors should always be replaced if they are damaged or leaking, vehicle manufacturers don't always recommend replacing compressors during the retrofit procedure if the compressor is in good shape.

Below is a table that shows the makes and models of passenger cars, minivans and light trucks for which vehicle manufacturers prescribe compressor replacement during the retrofit procedure. Although the information in the table is based on technical service bulletins (TSBs) issued by vehicle manufacturers, no vehicle manufacturer has reviewed this table, and EPA does not warrant or guarantee the accuracy of any of this information. This information is being provided solely as a service for automotive technicians, who should rely on their experience and judgment to determine the most appropriate steps in retrofitting each vehicle that comes into a service facility. This information is not meant to replace the applicable TSB, which should be reviewed prior to commencing any retrofit procedure. Some TSBs specify an appropriate replacement compressor; the number for this part can be obtained by contacting a dealer or reviewing the TSB.

Manufacturer	Models and Years Covered by TSBs	Models and Years For Which Manufacturer Recommends Replacing Compressor
Acura	Integra: 1986-93 Legend: 1986-92 Vigor: 1992-94 NSX: 1991-92	none
Audi	All	Vehicles with Zexel compressors: none Vehicles with Nippondenso compressors: none, but compressor shaft seal should be replaced. Audi's TSB states that retrofit is not planned for vehicles equipped with York or Delco-Air compressors.
BMW	TSBs not available as of date of this document	

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<p>Chrysler/ Plymouth/ Dodge/Jeep</p> <p>NOTE that Chrysler specifies that if a compressor has been previously replaced with a Sanden 709CA or 709CC series compressor, it will not have to be replaced unless it has failed</p>	<p>Acclaim/LeBaron Sedan/Spirit: 1989-93 Aries/Reliant: 1989 Caravan/Voyager/Town & Country: 1984-92 Cherokee/Wagoneer: 1988-94 Comanche: 1988-92 Dakota/Dakota Cab & Chassis: 1988-93 Daytona: 1989-93 Dynasty/New Yorker/New Yorker Salon: 1988-93 Gran Fury/Diplomat/Newport/Fifth Avenue: 1988-89 Grand Wagoneer: 1988-91 Horizon/Omni: 1988-90 Imperial/New Yorker Fifth Avenue: 1990-93 Maserati Coupe: 1990-91 Lancer/LeBaron GTS: 1989 LeBaron Coupe/LeBaron Convertible: 1989-93 Ram Pickup/Ram Cab & Chassis: 1988-93 Ram Van/Wagon: 1988-94 Shadow/Shadow Convertible/Sundance: 1989-93 Voyager: 1992 Wrangler: 1988-94</p>	<p>Acclaim/LeBaron Sedan/Spirit: 1989-90 Aries/Reliant: 1989 Caravan/Voyager/Town & Country: 1984-87 2.2L, 2.5L, 2.6L, and 3.0L; 1988 2.2L, 2.5L, 3.0L, and 3.0L with dual a/c; 1989-90 2.5L Dakota/Dakota Cab & Chassis: 1988 2.2L and 3.9L; - 1989 2.5L, 3.9L and 5.2L; 1990-91 2.5L and 3.9L Daytona: 1989-90 Dynasty/New Yorker/New Yorker Salon: 1988; 1989-90 2.5L Gran Fury/Diplomat/Newport/Fifth Avenue: 1988-89 Horizon/Omni: 1988-90 Lancer/LeBaron GTS: 1989 LeBaron Coupe/LeBaron Convertible: 1989-90 Ram Pickup/Ram Cab & Chassis: 1988 3.9L, 5.2L, and 5.9L; 1989 3.9L and 5.2L; 1989-91 5.9L; 1990-91 3.9L and 5.2L Ram Van/Wagon: 1988-90 3.9L, 5.2L, 5.9L, and any of these with dual a/c Shadow/Shadow Convertible/Sundance: 1989-91</p>

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Ford/Lincoln-Mercury/ Merkur	Aerostar: 1986-93 Bronco: 1988-93 Bronco II: 1988-90 Capri: 1991-93 Cargo Series: 1989-94 CL-9000: 1985-91 Continental: 1988-93 Crown Vic/Grand Marquis: 1986-93 Econoline: 1988-93 Escort: 1988-93 Explorer: 1991-93 F Series Med./Heavy Trucks: 1985-95 F Super Duty: 1988-93 F-150/350: 1988-93 Festiva: 1988-93 L Series: 1985-94 Mark VII: 1986-92 Mustang: 1988-93 Probe: 1989-93 Ranger: 1988-93	Probe: 1993 2.0L and 2.5L (Minivans and light truck applications: none)
Ford/Lincoln-Mercury/ Merkur (cont'd)	Scorpio: 1988-89 T-Bird/Cougar: 1986-93 Taurus/Sable: 1986-93 Tempo/Topaz: 1988-93 Town Car: 1986-93 Tracer: 1987-89, 1991-93 Villager: 1993 XR4TI: 1985-89	Probe: 1993 2.0L and 2.5L (Minivans and light truck applications: none)
Geo	Metro: 1989-93 Nova: 1985-88 Prizm: 1989-93 Spectrum: 1985-89 Sprint: 1985-88 Storm: 1990-93 Tracker: 1989-93	none

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GM (except Geo and Saturn)	6000: 1984-93 88: 1986-93 98: 1985-93 (not available for RW drive) Achieva: 1985-93 Allante: 1987-93 Astro: 1987-93 Beretta: 1987-93 Blazer: 1987-93 Bonneville: 1986-93 (not available for RW drive) Caballero: check for availability Calais: 1985-93 Camaro: 1984-93 Caprice: 1984-93 Cavalier: 1984-93 Celebrity: 1984-93 Century: 1984-93 Chevette: not available Cimarron: 1984-93 Citation: not available Corsica: 1987-93 Corvette: 1984-93 Cutlass Cierra: 1984-93 Cutlass: 1987-93 (not available for RW drive) Cutlass Supreme: 1988-93 DeVille: 1985-93 (not available for RW drive)	see next page

Manufacturer	Models and Years Covered by TSBs	Models and Years For Which Manufacturer Recommends Replacing Compressor
GM (except Geo and Saturn) (cont'd)	<p>El Camino: check for availability Eldorado: 1984-93 Fiero car lines: 1984-93 Fiero truck lines: 1987-93 Firebird: 1984-93 Firenza: 1984-93 Fleetwood: 1985-93 (not available for RW drive) Fleetwood Brougham: 1984-93 Grand Prix: 1987-93 (not available for RW drive) Grand Am: 1985-93 Jimmy: 1987-93 LeMans: 1988-93 LeSabre: 1986-93 Lumina: 1988-93 Lumina APV: 1990-93 Metro: 1985-93 Monte Carlo: 1987-93 (not available for RW drive) Nova: 1985-93 Omega: not available Park Avenue: 1985-93 (not available for RW drive) Phoenix: not available Prizm: 1985-93 Rally: check for availability Reatta: 1987-93 Regal: 1987-93 (not available for RW drive) Riviera: 1984-93 Roadmaster: 1984-93 Safari: 1987-93 Seville: 1984-93 Sierra: 1988-93 Silhouette: 1990-93 Silverado: 1988-93 Sixty Special: 1991-93 Skyhawk: 1984-93 Skylark: check on availability Somerset: 1985-93 Sonoma: 1987-93 Spectrum: 1985-93 Storm: 1985-93</p>	<p><u>V5 Compressors</u> 1984-87 models: none 1988-89 models: check date code: is it between 1/88 and 8/89? If yes, is the label royal blue? If yes, then replace compressor; if no, then do not replace. If the date code is not between 1/88 and 8/89, then do not replace compressor. 1990-93 models: none</p> <p><u>R4 Compressors</u> 1984-89 models: none 1990-93 models: check date code: is it between 1/1/90 and 6/18/93? If yes, then replace compressor. 1994 models: none</p> <p><u>Six Cylinder Compressors</u> All A6 compressors: do not replace All DA6 compressors: replace (but check date code: if after 1988, the unit is an HR6, and replacement is not necessary) All HR6 compressors: do not replace</p> <p>BUT ...</p> <p>Corvettes: 1988-93 L98 and LT1 engines -- replace compressors 1990-93 LT5 engines -- replace compressors</p> <p>BUT ... For 1993 models, check the part number on the original OEM compressor -- if P/N is 10135691, replace; if P/N is 10238383, do not replace.</p>

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GM (except Geo and Saturn) (cont'd)	Toronado: 1984-93 Tracker: 1989-93 Transport: 1990-93 Vandura: check for availability Yukon: 1988-93	see previous page
Honda	Accord: 1986-89 only those models with Nippondenso or Kiehin compressors; 1990-93 all models Civic: 1985-91 only those models with Sanden compressor; 1992-93 all models Prelude: 1990-92 only those models with Sanden compressor	Accord: 1986-89 models with Kiehin compressors
Hyundai	Elantra: 1992-93 Excel: 1990-93 Scoupe: 1991-93 Sonata: 1989-94	none
Infiniti	All 1990-93 vehicles	Q45: all years
Isuzu	TSBs not available as of date of this document	
Jaguar	TSBs not available as of date of this document	
Land Rover	All 1987-94 Range Rover Classics and Defender 110s	none
Lexus (USA and Canada)	All models	none (as stated in Toyota (Canada) TSBs)
Mazda (Canada)	323/Protege: 1985-94 MX-6/626: 1986-93 929: 1988-91 MX-3: 1992-93 MX-5: 1990-93 RX-7: 1986-94 MPV: 1989-93 B-Series Trucks: 1986-93	Protege: 1990-94 626/MX-6: 1993 929: 1992-93 MX-3: 1992-93
Mazda (USA)	TSBs not available as of date of this document	
Mercedes	All makes and models using Nippondenso, York or Delco compressors	none

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Mitsubishi	TSBs not available as of date of this document	
Nissan	200 SX: 1985-88 240 SX: 1989-93 300 ZX: 1984-93 Axxess: 1990 Maxima: 1985-92 Pathfinder/Truck: 1986-92 Pulsar: 1987-90 Quest: 1993-94 Sentra: 1987-93 Stanza: 1987-92, wagon 1986-88	240 SX: 1991-93
Porsche	All models back to (and including) 1960	none
Saab	All 900, 900 convertible and 9000 models	none
Saturn	All models	none
Subaru	SVX: 1992 Impreza: 1993 Legacy equipped with Zexel compressor: 1990-93 Legacy equipped with Calsonic compressor: 1990-91 non-turbo, 1991 turbo, 1992-93 turbo and non-turbo	none
Suzuki	TSBs not available as of date of this document	
Toyota (Canada)	All 1985 and newer models	none
Toyota (USA)	4Runner: 1986-89 4-cyl., 1988-89 6-cyl.; 1990-93 Camry: 1986 2S-E; 1987-93 Celica: 1986-93 Corolla: 1986-93 Cressida: 1986-92 Pickup: 1986-88 22R, 3VZ; 1989-94 Land Cruiser: 1986-93 MR2: 1986-89 4A; 1993 Paseo: 1992-93 5E Previa: 1991-93 2TZ Supra: 1986 5M; 1986½-92 7M Tercel sdn: 1986 Tercel, all others: 1986-93 Van: 1986-89 4Y	none

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Volkswagen	Golf Cabriolet: 1985-92 Golf/Jetta: 1985-92 Scirocco: 1985-89 Corrado: 1989-92 Passat: 1990-92 Quantum: 1985-88 Vanagon: 1985-91 EuroVan: 1992	none
Volvo	All models back to and including 1975 models	none